



Analytical Resources, Incorporated
Analytical Chemists and Consultants

August 19, 2004

Mr. Bill Mehnert
Ecology and Environment, Inc
333 SW 5th Avenue, Suite 608
Portland, OR 97204

Subject: 10-AY-0002
ARI # GX62

Dear Mr. Menhert;

The analytical testing you requested on this project was grain size analysis by ASTM D422. A data plot and summary tables are be provided.

If you have any questions on the data or its presentation, please call me at 206-695-6246.

Best Regards,
Analytical Resources, Inc.

Harold Benny
Geotechnical Laboratory Manager



Analytical Resources, Incorporated
Analytical Chemists and Consultants

Client: Ecology and Environment

Project No.: GX62

Client Project: 10-AY-0002

Case Narrative

1. The sample was submitted for grain size analysis according to ASTM methodology.
2. The sample was a well graded sand. It was run for both the sieve and hydrometer analysis.
3. The data is provided in summary tables and a plot.
4. There were no noted anomalies in the samples or methods on this project.

Approved by:

Title:

Harold Beatty
Geotechnical Division Manager

Date:

8/19/04

No: 10-AY-0002

Lab Phone: 206-695-6200

Special Instructions: Please return cooler to: Ecology + Environment, Inc., 333 SW 5th Ave, #808 Portland, OR 97204	SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #
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[illegible]

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Percent Finer (Passing) Than the Indicated Size

Sieve Size (microns)	1"	3/4"	1/2"	3/8"	#4 (4750)	#10 (2000)	#20 (850)	#40 (425)	#60 (250)	#100 (150)	#200 (75)	32	22	13	9	7	3.2	1.3
Child Play	100.0	82.9	74.9	73.0	65.7	58.4	51.8	46.7	41.6	37.9	33.5	25.1	22.5	19.5	16.5	14.3	8.7	5.2

Testing performed according to ASTM D421/D422

GX62A

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Percent Retained in Each Size Fraction

Sample No.	% Gravel	% Coarse Sand	% Medium Sand	% Fine Sand	% Total Sand	% Very Coarse Silt	% Coarse Silt	% Medium Silt	% Fine Silt	% Very Fine Silt	% Clay
Size (microns)	> 4750	4750-2000	2000-425	425-75	4750-75	75-32	32-22	22-13	13-9	9-3.2	<3.2
Child Play	34.3	7.3	11.8	13.1	32.2	8.4	2.6	3.0	3.0	7.8	8.7

Grain Size Distribution by Hydrometer

